

Claims

1. A method for identifying elite event GAT-ZM1 in biological samples, which method comprises detection of a GAT-ZM1 specific region with a specific primer or probe which specifically recognizes the 5' or 3' flanking region of GAT-ZM1.

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2. The method of claim 1, said method comprising amplifying a DNA fragment of between 100 and 350 bp from a nucleic acid present in said biological samples using a polymerase chain reaction with at least two primers, one of which recognizes the 5' or 3' flanking region of GAT-ZM1, the other which recognizes a sequence within the foreign DNA.

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3. The method of claim 2, wherein one of said primers recognizes a sequence within the 5' flanking region of GAT-ZM1, and said other primer recognizes a sequence within the foreign DNA.

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4. The method of claim 3, wherein one of said primers recognizes a sequence within the 5' flanking region of SEQ ID NO: 6, and the other recognizes a sequence within the foreign DNA.

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5. The method of claim 4, wherein said primers comprise the sequence of SEQ ID NO: 11 and SEQ ID NO: 12, respectively.

6. The method of claim 2, which method comprises amplifying a fragment of between 150 and 220 bp using the GAT-ZM1 identification protocol, whereby the sequence of said primers corresponds to the nucleotide sequence of SEQ ID No 11 and SEQ ID No 12 respectively.

7. The method of claim 6, which method comprises amplifying a fragment of about 202 bp, using the GAT-ZM1 identification protocol.

8. A kit for identifying elite event GAT-ZM1 in biological samples, said kit comprising at least one PCR primer, which recognizes a sequence within the 5' or 3' border flanking region of GAT-ZM1.

9. The kit of Claim 8, which further comprises at least a second PCR primer which recognizes a sequence within the foreign DNA of GAT-ZM1.

10. The kit of claim 8, wherein said at least one PCR primer recognizes a sequence within the 5' flanking region of SEQ ID NO: 6.

11. The kit of claim 8, wherein said at least two PCR primers comprise the sequence of SEQ ID NO: 11 and SEQ ID NO: 12, respectively.

12. A primer for use in a GAT-ZM1 PCR identification protocol, having a sequence which, under optimized PCR conditions specifically recognizes a sequence within the 5' or 3' flanking region of GAT-ZM1.

13. The primer of claim 12, having a sequence which has at least 80% sequence identity with a sequence within SEQ ID NO: 6 or SEQ ID NO: 10.

14. The primer having the sequence of SEQ ID NO: 11.

15. The primer having the sequence of SEQ ID NO: 12.

16. The method of claim 1, which method comprising hybridizing a nucleic acid of biological samples with a specific probe for GAT-ZM1.

17. The method of claim 16, wherein the sequence of said specific probe has at least 80% sequence identity with a sequence comprising part of the 5'

flanking sequence of GAT-ZM1 and the sequence of the foreign DNA contiguous therewith.

18. The method of claim 17, wherein the sequence of said specific probe has at least 80% sequence identity with SEQ ID NO: 6, from nucleotide 286 to 487.

19. A kit for identifying elite event GAT-ZM1 in biological samples, said kit comprising a specific probe, capable of hybridizing specifically to a specific region of GAT-ZM1.

20. The kit of claim 19, wherein the sequence of said specific probe has at least 80% sequence identity with a sequence comprising part of the 5' flanking sequence of GAT-ZM1 and the sequence of the foreign DNA contiguous therewith.

21. The kit of claim 20, wherein the sequence of said specific probe has at least 80% sequence identity with SEQ ID NO: 6, from nucleotide 286 to 487, or the complement thereof.

22. A specific probe for the identification of elite event GAT-ZM1 in biological samples.

23. The probe of claim 22, which has at least 80% sequence identity with a sequence comprising part of the 5' flanking sequence of GAT-ZM1 and the sequence of the foreign DNA contiguous therewith, or the complement thereof.

24. The probe of claim 23 which has at least 80% sequence identity with SEQ ID NO: 6, from nucleotide 286 to 487 or the complement thereof.

25. A specific probe for the identification of elite event GAT-ZM1 in biological samples, the sequence of being essentially similar to SEQ ID NO: 6, from nucleotide 286 to 487 or the complement thereof.

5 detection of a GAT-ZM1 specific region with a specific primer or probe which
specifically recognizes the 5' or 3' flanking region of GAT-ZM1, in seed samples.

27. A method for screening seeds for the presence of GAT-ZM1, which method comprises detection of a GAT-ZM1 specific region with a specific primer or probe which specifically recognizes the 5' or 3' flanking region of GAT-ZM1, in samples of seed lots.